**DRAFT Learning Module:**

## Building an Effective Stormwater Funding Strategy

**U.S. EPA Water Infrastructure and Resiliency Finance Center**

**Overall Course Chapters**

- Chapter 1: Prepare for Success: Get Organized and Build Support
- Chapter 2: Establish Your Program Goals, Your Key Problems, and Your Program Plan
- Chapter 3: Determine Your Present and Future Program Costs
- Chapter 4: Evaluate Revenue and Capital Project Financing Options
- ****Chapter 5: Developing and Administering a Dedicated Revenue Source****
- Chapter 6: Engaging Private Partners and Investors for Stormwater Management

- **Chapter 5: Developing and Administering a Dedicated Revenue Source**
  - Introduction
  - Subchapter 5.1: *Get Ready*: Building Public Support and Knowing Your Needs
  - Subchapter 5.2: *Get Set*: Assessing Your Options and Planning for Success
  - Subchapter 5.3: *Go*: Creating Your Framework and Deploying Your Program
  - Subchapter 5.4: Resources

### Module Navigation and Introduction

| **Chapter 5: Developing and Administering a Dedicated Revenue Source** | | |
|---|---|---|
| **Slide no.** | **Layout notes** | **Content** |
| 1 | Chapter title slide with stock photo | **Chapter 5: Developing and Administering a Dedicated Revenue Source** |
| 2 | Text with Stock Image | **Introduction**<br>A dedicated revenue source can help your community by improving certainty in annual program planning and budgeting and help secure other sources of financing to run a robust program.<br><br>However, as of 2018, only about one quarter of MS4 communities across the country have established dedicated revenue sources (e.g., stormwater utility fees) as part of their municipal stormwater program funding portfolio. Many communities with dedicated revenue sources receive insufficient revenue from these sources and have difficulty increasing rates. Without sufficient, dedicated revenue sources, community stormwater programs will likely face perennial difficulties in meeting public and regulatory demands over time.<br><br>Developing a dedicated revenue source can be very challenging, but it can be done!<br><br>This chapter provides resources and advice to help you in the process. |

| | | |
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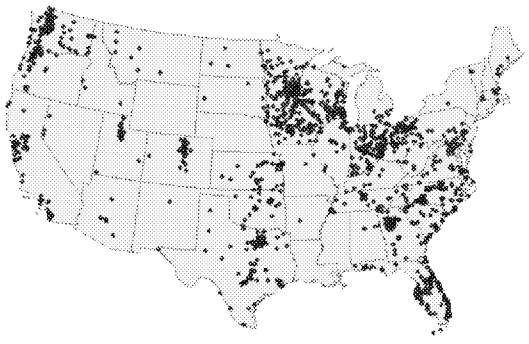
| 3 | Text with background image and box; click button to bring up map of locations | **Funding Your Stormwater Utility**<br>• The vast majority of stormwater dedicated revenue programs use utility **fees** as the revenue sources. According to the 2018 Western Kentucky University Stormwater Utility Survey, there were 1,681 **stormwater utilities** in the U.S. (in 40 states and the District of Columbia).<br><br>What is a stormwater utility?<br>A stormwater utility (called a *stormwater authority* in Pennsylvania) is a mechanism to fund the cost of municipal services directly related to the control and treatment of stormwater. A stormwater utility will operate similarly as an electric or water utility. The utility will be administered and funded separately from the revenues in the general fund, ensuring a dedicated revenue source for the expense of stormwater management.<br><br>Click here for a map displaying communities with stormwater utilities in the U.S.<br><br>  <br>**Location of Stormwater Utilities in the U.S. as of 2018 (developed by Western Kentucky University, 2018[1])** |
| 4 | Module navigation slide- subchapters | **The chapter is arranged into 4 subchapters.**<br><br>• **Subchapter 5.1: *Get Ready*: Building Public Support and Knowing Your Needs**<br>  ○ *Jump to Slide 4*<br>• **Subchapter 5.2: *Get Set*: Assessing Your Options and Planning for Success**<br>  ○ *Jump to Slide 10*<br>• **Subchapter 5.3: *Go*: Creating Your Framework and Deploying Your Program**<br>  ○ *Jump to Slide 16*<br>• **Subchapter 5.4: Resources**<br>  *Jump to Slide 19* |

## *Subchapter 5.1: Get Ready: Building Public Support and Knowing Your Needs*

<table>
<tr><th colspan="3">Subchapter 5.1: Get Ready: Building Public Support and Knowing Your Needs</th></tr>
<tr><th>Slide no.</th><th>Layout notes</th><th>Content</th></tr>
<tr><td>5</td><td>Text with Stock Image evoking public participation</td><td>Engage the Public Early – You Will Need their Support<br>To establish a dedicated revenue source, you will need public stakeholder involvement and buy-in. This must be done at all stages of the process. Chapter 1 [INSERT LINK] of this learning module discusses in more detail how you can build the "brand" for your stormwater program and garner stronger support through robust public outreach and involvement.</td></tr>
<tr><td>6</td><td>Text with Stock Image</td><td>Your Customers Need to Know What They are Buying<br>When establishing a dedicated revenue source, your customers must know what they are buying and the benefits they will receive over time. Therefore, you need to establish program goals, identify and address challenges your program will need to address, and develop a program plan. You will need to have a well-thought-out and designed stormwater management program, ideally based on a solid asset management planning system. Chapter 2 [INSERT LINK] provides detailed information on these topics.</td></tr>
<tr><td>7</td><td>Text with Stock Image</td><td>You Must Know Your Program's Needs<br>Based on analysis of your present and future program goals and plans, you need to assess what it will cost to implement your program. This information is crucial to demonstrating to the public that you know what it will take to implement your program effectively in the future, and to making a persuasive case that your program deserves dedicated revenue. Chapter 3 [INSERT LINK] discusses methods for estimating present and future program costs.</td></tr>
<tr><td>8</td><td>Table listing a host of topics included in the chapter; maybe link to these specific areas below in the chapter to be navigational</td><td>The rest of this chapter focuses on developing and administering a dedicated revenue source. It addresses topics such as:<br><table><tr><td>Fees vs. Taxes</td><td>Viability Under State Laws</td><td>Types of Rate Structures</td></tr><tr><td>Options to Reduce Fees</td><td>Feasibility</td><td>Public Involvement</td></tr><tr><td>Data Collection</td><td>Billing System Considerations</td><td>Notifying Ratepayers</td></tr><tr><td>Distributing Collected Fees</td><td>Ordinances</td><td>Rate Adjustments</td></tr></table></td></tr>
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## *Subchapter 5.2: Get Set: Assessing Your Options and Planning for Success*

| Subchapter 5.2: Get Set: Assessing Your Options and Planning for Success | | |
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| **Slide no.** | **Layout notes** | **Content** |
| 9 | Subchapter title slide – image and text.<br>Subchapter navigation slide | **5.2: Get Set: Assessing Your Options and Planning for Success**<br>• 5.2.1 Assess Your Fee/Tax Options and Begin to Build Public Support (jump to slide X)<br>• 5.2.2 Planning Your Funding Structure and Process (jump to slide X)<br>• 5.2.3 Developing Ordinances/Rules to Implement your Dedicated Revenue Source (jump to slide X) |

| Subchapter 5.2: Get Set: Assessing Your Options and Planning for Success | | |
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| **Slide no.** | **Layout notes** | **Content** |
| | Title with each subchapter on separate "right arrow" link | |
| 10 | Section title slide – image and text. Text with links to italicized text (which links to detailed information under each italicized section | **5.2.1 Assess Your Fee/Tax Options and Begin to Build Public Support**<br>• *Understanding the Difference Between Fees and Taxes* (jump to slide X)<br>• *Are Fees or Taxes Viable Under Your State Law?* (jump to slide X)<br>• *Rate Structure Overview and Types of Rates/Fees* (jump to slide X)<br>• *Providing Options to Reduce or Waive Fees, or Credit Onsite or Offsite Work* (jump to slide X)<br>• *Evaluating Feasibility* (jump to slide X)<br>• *Involving the Public and Key Decision Makers in Program Design and Discussions* (jump to slide X) |
| 11 | Definitions in pop-up boxes | **Understanding the Difference Between Fees and Taxes**<br>• Most communities have the legal authority to collect fees, but few have the direct authority to collect taxes. Thus, stormwater utility fees are more common across the country than stormwater taxes.<br>○ **FEES**<br>A "fee" is money collected for a specific purpose, such as providing stormwater services or building and maintaining stormwater infrastructure. The money collected to satisfy the fee must be proportionate to the cost of providing the service. Unlike taxes, excess funds from a fee cannot be diverted and used for other purposes. Legal requirements vary across the country, but fee authority must be approved by governing councils or property owners who must pay the fees.<br>○ **TAXES**<br>A new tax must generally receive approval through a legislative action or public vote. Many utilities that have instituted fees have been challenged in court claiming the fee constitutes a new tax that the city or county is not legally allowed to levy without public approval. A fee initiative must be carefully designed to make the link between funds collected and services funded and thereby avoid vulnerability to challenge as a hidden tax.<br>The 2016 NACWA report titled *Enacting, Implementing, & Funding Stormwater Programs* provides significant detail on legal issues that can impact stormwater funding programs. Explore this resource if you would like to dive into further detail on this subject. |
| 12 | Image and text; three large boxes to click on for the bolded text to bring up the supporting information | **Considerations for Funding Source Selection**<br>• **Tax Exempt Properties.** One advantage of a stormwater utility fee vs. a stormwater tax is that tax-exempt properties, such as schools and churches (which typically own impervious surfaces such as buildings and parking lots), are not exempt from the fee. However, this can present |

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| | | public relations issues for communities related to these types of properties.<br>• **"Opting-out" of the Service.** For a charge to qualify as a "fee," some states require that it be voluntary. In this situation, property owners must be allowed to opt-out of the charge by limiting their use of the service for which the fee is being charged. This presents an issue for stormwater utilities since a property typically cannot control the use of service and the fee isn't waived in months with no rain.<br>• **Opportunities to Reduce Fees.** One alternative for allowing opt-out options for stormwater utilities fees is to allow the rate payer to take on some of the stormwater management responsibilities by retaining runoff on their own properties, which reduces the burden on public infrastructure. Some options for controlling runoff are installing rain barrels for smaller properties and constructing an on-site stormwater management facility for larger business and industrial sites. In these cases, the program can be designed to provide fee offsets or credits through which a property owner reduces fees owed as a result of implementing onsite stormwater controls. As further discussed in **Chapter 6** [*INSERT LINK*], a stormwater fee program can be designed to provide an incentive (in the form of a fee reduction) to encourage implementation of onsite controls by private landowners. |
| 13 | Image and text | **Are Fees or Taxes Viable Under Your State Law?**<br>• Knowing your state and local laws is important to know whether a stormwater fee or tax is legally viable in your locality. In legal challenges to local stormwater utilities, issues generally fall in two categories including:<br>○ (1) The authority to enact, implement, and fund the program.<br>○ (2) The legality of the financing mechanism and methodology involved. |
| 14 | Image and text | **Determining Legal Authority**<br>• The legal authority to implement stormwater utilities generally comes from an enabling statute or through the state's constitution or charter. In some states, the grant of authority is still ambiguous or questionable. In these situations, the locality should consider requesting a state Attorney General opinion and/or working with the state legislature to make the grant of authority more explicit.<br>• It is important to keep informed about your states specific laws regarding fees or taxes as they are subject to change. |
| 15 | Main text on slide; State examples in pop-up boxes | **State-Level Stormwater Statutes**<br>• Although a comprehensive list of where stormwater fees and taxes are more viable under individual state law does not exist, **Figure 1** shows the number of established stormwater utilities in 2018 in each state. The higher the number of stormwater utilities, proportional to the number of MS4s in the state, indicates that the state likely has a less challenging statutory landscape for passing a stormwater fee or tax.<br>○ **PENNSYLVANIA**<br>For example, Pennsylvania has close to 1,000 MS4s, but there are only 19 stormwater utilities (termed "stormwater authorities" in |

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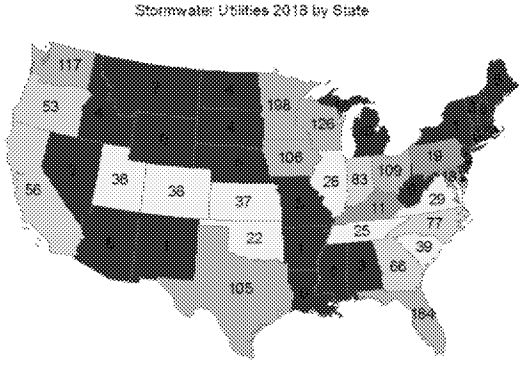
| | | PA). These utilities were able to be formed, in large part, because of a 2013 change to state law to open the possibility for stormwater authority formation.<br>○ **MICHIGAN**<br>Conversely, a 2013 ruling in Michigan (Jackson County vs. City of Jackson) in the court of appeals held that the stormwater management charge was a tax and not a fee, thus effectively halting the formation of stormwater utilities in the state (there are 10 established stormwater utilities in the state as of 2018).<br>  <br><br>**Figure 1 – Number of Stormwater Utilities in the U.S. as of 2018 by State (developed by Western Kentucky University, 2018[1])** |
| 16 | Image and text; coastal image for CA | **Case Study: California's Proposition 218 and the Santa Monica Clean Beaches and Oceans Special Tax**<br>• In California, Proposition 218 gave the final decision on establishing new fees or taxes to the voter. Prop 218 requires 2/3 approval from residents who voted. Property owners are not allowed to vote unless also a resident.<br>• This has posed challenges to some communities in establishing dedicated revenue sources for stormwater programs.<br>• Prior to voting on the new tax, Santa Monica did focus marketing groups and telephone surveys to select the most acceptable fee rate and title for tax. The city emphasized the importance of clean, healthy beaches and ocean, and protecting future generations.<br>• To gain support of multi-family property owners, the city approved a pass-through of fees to the renters.<br>• More detailed information about Santa Monica's Clean Beaches and Ocean Special Tax available here |
| 17 | Image and text | **Rate Structure Overview**<br>• Most stormwater utilities base their fees at least in part on the percentage of impervious cover of parcels of developed land within the community. |

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<tr><td></td><td></td><td>One way to set stormwater fees is to determine the exact amount of impervious surface on each parcel through aerial imagery and GIS to charge each property owner accordingly. However, this method is typically time-prohibitive and too expensive for a community to establish for individual residential properties. Instead, most utilities set up rate structures that are less complicated and easier to implement.</td></tr>
<tr><td>18</td><td>Directory<br>Text with links to italicized text (which links to detailed information under each italicized section</td><td>Types of Rates and Fees<br><br>There are several methods that stormwater utilities use to calculate service fees. Communities may modify these approaches slightly to meet unique billing requirements. Impervious area is the most important factor influencing stormwater runoff and is therefore a major element in each method.<br><br>• Equivalent Residential Unit (ERU) (jump to slide X)<br>• Flat Fee (jump to slide X)<br>• Tiered Fee (jump to slide X)<br>• Dual Fee System (jump to slide X)<br>• Residential Equivalence Factor (REF) (jump to slide X)<br>• Intensity Development (ID) (jump to slide X)<br>• Equivalent Hydraulic Area (EHA) (jump to slide X)</td></tr>
<tr><td>19</td><td></td><td></td></tr>
<tr><td>20</td><td>Definition and click to pull up table; button to pull up case study info</td><td>Equivalent Residential Unit (ERU)<br>The Equivalent Residential Unit (ERU) system (also known as the Equivalent Service Unit (ESU)) is the most widely used method[1]. An ERU is the average impervious area on a single family residential (SFR) parcel (although some communities define it as the average of all residential parcels). A representative sample of SFR parcels is reviewed to determine the impervious area of a typical SFR parcel. This amount is called one ERU. Fees for non-residential properties are proportional to the ratio of the parcel impervious area to the ERU.<br><br>Click here for some examples of ERU-based fees for stormwater services charged in some communities across the country. [Click brings up table]<br><br>
<table>
<tr><th>Location</th><th>Population</th><th>Fee Type</th><th>Monthly Fee</th><th>Annual Revenue</th></tr>
<tr><td>Central Point, OR</td><td>17,308</td><td>ERU</td><td>$6.50 per month</td><td>$1,015,800</td></tr>
<tr><td>Daytona Beach, FL</td><td>61,028</td><td>ERU</td><td>$8.67 per month</td><td>$9,785,395</td></tr>
<tr><td>Minneapolis, MN</td><td>387,753</td><td>ERU</td><td>$11.42 per month</td><td>$39,038,000</td></tr>
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[1] 2018 Western Kentucky Stormwater Utility Survey - https://www.wku.edu/seas/undergradprogramdescription/swusurvey2018.pdf

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**Case Study: South Burlington Vermont Stormwater Utility Fee**

- The utility was established to address increasingly complex issues related to stormwater management.
- Fees are based on the amount of impervious area on a property using the ERU system.
- A scientific process determined that a typical single-family home has 2,700 square feet of impervious surface and are assessed a fee of $4.50 per month.
- Duplexes and triplexes are assessed fees of $2.25 and $1.50 per month, respectively.
- All remaining properties are assessed a fee depending on the amount of impervious surface.

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<tr><td>21</td><td>Definition and click to pull up table; button to pull up case study info</td><td>

**Flat Fee**

In the flat fee system, parcels in a community pay the same stormwater fee. Normally this fee structure is limited to residential properties. The benefit of charging a flat fee for all residential properties is the low investment needed for administration of this type of program. The shortcoming is the lack of equity between various types of residential properties, with some creating much more runoff, and therefore, impacting the system more than others.

Click here for some examples of flat fees for stormwater services charged in some communities across the country. [Click brings up table]

<table>
<tr><th>Location</th><th>Population</th><th>Fee Type</th><th>Monthly Fee</th><th>Annual Revenue</th></tr>
<tr><td>Golden, CO</td><td>19,393</td><td>Flat Fee</td><td>$3.20 per month</td><td>$934,650</td></tr>
<tr><td>Charleston County, SC</td><td>235,015</td><td>Flat Fee</td><td>$3.00 per month</td><td>$3,500,000</td></tr>
<tr><td>Mesa, AZ</td><td>462,821</td><td>Flat Fee</td><td>$7.32 per month</td><td>$10,606,284</td></tr>
</table>

**Case Study: Aurora, IL**

- This community of about 170,000 people uses a flat fee to generate stormwater program revenue.
- Residential and non-residential properties (such as businesses) are charged a bimonthly fee of $6.90.
- The fees generate approximately $3M per year in annual revenue.
- Bills for this stormwater fee are provided with each water and sewer service account.

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<tr><td>22</td><td>Definition and click to pull up table; button to pull up case study info</td><td>
Tiered Fee<br>
The tiered fee system charges a single fee for a range of impervious area. As with the flat fee structure, this approach usually targets residential parcels. This fee structure improves upon the flat fee approach by recognizing the differing amount of impacts on the stormwater system associated with varying residential property types.<br><br>
Click here for some examples of tiered fees for stormwater services charged in some communities across the country. [Click brings up table]<br><br>
<table>
<tr><th>Location</th><th>Population</th><th>Fee Type</th><th>Monthly Fee</th><th>Annual Revenue</th></tr>
<tr><td>Logansport, IN</td><td>19,684</td><td>Tiered Fee</td><td>$7.74 per month</td><td>$1,033,289</td></tr>
<tr><td>Winston-Salem, NC</td><td>185,776</td><td>Tiered Fee</td><td>$69.25 per month (CHECK-seems high)</td><td>$10,108,165</td></tr>
<tr><td>Seattle, WA</td><td>602,778</td><td>Tiered Fee</td><td>$36.00 per month (CHECK-seems high)</td><td>$54,000,000</td></tr>
</table>
Case Study: Durham, NC<br>
• Fees are based on a tiered fee system and generate about $11M in annual revenue.<br>
• Tiered fees for residential properties escalate based on amount of impervious cover on each property.<br>
• Less 2,000 square feet impervious area = $39.12 annual fee.<br>
• Between 2,000 to 4,000 square feet impervious area = $81 annual fee.<br>
• Greater than 4,000 square feet impervious area = $162.24 annual fee<br>
• Fees for commercial or non-residential properties are determined using the equivalent residential unit (ERU) method.
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<tr><td>23</td><td>Definition and click to pull up table; button to pull up case study info</td><td>
Dual Fee System<br>
This system typically charges one fee for residential properties and a different single fee for non-residential properties such as commercial.<br><br>
Click here for some examples of fees for stormwater services charged in some communities across the country under a dual fee system. [Click brings up table]
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<table>
<tr><th>Location</th><th>Population</th><th>Fee Type</th><th>Monthly Fee</th><th>Annual Revenue</th></tr>
<tr><td>Warren County, KY</td><td>43,226</td><td>Dual Fee System</td><td>$4.00 per month</td><td>$1,000,000</td></tr>
<tr><td>Galveston, TX</td><td>47,743</td><td>Dual Fee System</td><td>$7.00 per month</td><td>$546,380</td></tr>
<tr><td>Hartford County, MD</td><td>246,849</td><td>Dual Fee System</td><td>$7.00 per month</td><td>$1,065,725</td></tr>
</table>
Case Study: Newton, Massachusetts Stormwater Drain Fee<br>
• Fees are based on a flat rate, with different fees for residential and commercial properties.<br>
• Residential properties are assessed a fee of $6.25 per quarter, and all other properties are assessed a fee of $37.50 per quarter.<br>
• The Board of Alderman determined that the programs operating costs would triple if the city determined rates based on individual lot sizes rather than using these flat fees.
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<tr><td>24</td><td>Definition and click to pull up table</td><td>
Residential Equivalent Factor (REF) System<br>
This system charges a fee based on the amount of runoff from a parcel compared to the runoff from a typical single family residential property. Often a standard storm is selected, for example, the 2-yr, 24-hour storm. Some research shows that this fee system will favor non-residential properties if the standard storm selected is larger, and it will favor residential properties if the standard storm is smaller (Campbell, et al. (2014)). Runoff is usually calculated using either the Soil Conservation Service (SCS) curve number method or the rational method.<br><br>
Click here for some examples of fees for stormwater services charged in some communities across the country under a Residential Equivalent Factor (REF) system. [Click brings up table]
<table>
<tr><th>Location</th><th>Population</th><th>Fee Type</th><th>Monthly Fee</th><th>Annual Revenue</th></tr>
<tr><td>Arden Hills, MN</td><td>9,642</td><td>Residential Equivalent Factor (REF)</td><td>$4.49 per month</td><td>$532,531</td></tr>
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| **Slide no.** | **Layout notes** | **Content** |
| | | <table><tr><td>Athens – Clarke County, GA</td><td>101,489</td><td>Residential Equivalent Factor (REF)</td><td>$3.50 per month</td><td>$3,400,000</td></tr><tr><td>Boulder, CO</td><td>310,048 (incl. County)</td><td>Residential Equivalent Factor (REF)</td><td>$16.82 per month</td><td>$5,301,116</td></tr></table> |
| 25 | Definition | **Intensity of Development (ID)**<br>This type of cost allocation system is based upon the relative amount of impervious cover on a site, and then applies a cost per total parcel area (impervious plus pervious area). The rate charged increases with the percentage of impervious area on a site.<br><br>An example provided in an EPA Region 3 fact sheet to illustrate this approach contrasts a site with no impervious cover with a charge of $0.08 per month per 1,000 square feet of total area served (i.e., total parcel area) while a parcel with 25% impervious cover has a charge that is twice that amount.<br><br>The benefit for this system is the ability to provide additional equity compared to the ERU approach by accounting for pervious areas as well as impervious area in the charge calculation. Disadvantages include increased complexity to determine charge and to explain to the public when compared to the ERU approach. |
| 26 | Definition | **Equivalent Hydraulic Area (EHA)**<br>This approach is like the Intensity Development (ID) method, in that it accounts for pervious as well as impervious areas in its charge; however, this method goes beyond the ID method by estimating the flows generated by a parcel.<br><br>The advantage to this approach is that it is more technically tied to the nature of the charge (stormwater runoff); and is therefore more equitable than the ID or the ERU approaches. Disadvantages are similar to the ID approach—it requires a relatively high level of effort to calculate the charge compared to other methods and it is similarly more difficult to explain to customers. |
| 27 | Definition | **Other Fee Systems**<br>Other fee systems include:<br>(1) a charge proportional to the gross parcel area,<br>(2) charging by the number and size of water meters, and<br>(3) charging by the number of parking spaces on a property. |
| 28 | Background image, text; click to bring up case study | **How do You Choose One Fee Structure Over Another?**<br>• Communities elect to use different fee structures based on various factors. You should consider aspects such as state or local legal constraints and the data needed to calculate fees with a chosen approach (for example, do |

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| | | you have impervious cover data readily available, or will be too burdensome an effort to collect?).<br>• Another key consideration is whether your community members would benefit from a simpler fee structure (e.g., flat fee, dual fee) or one that has more precision between the fee charged and the actual service provided (e.g., ERU, REF, ID, EHA). The approaches that may ultimately be more equitable in terms of service provided often include more complex processes to determine the appropriate rate; this can be more challenging to explain to your stakeholders. Meanwhile, flat fee systems can be easier to startup, explain, and administer but can be less equitable as a properties that generate significant runoff would pay the same fee as one that produces minimal runoff. As noted previously, the ERU system is the most widely used method today.<br><br>**Case Study: State Legal Decisions Influence the Rate Structure in Ann Arbor, MI**<br>• The City of Ann Arbor, Michigan established a stormwater management utility in the early 1980s and billed customers with a flat fee.<br>• A state supreme court decision in 1998 regarding another Michigan community's stormwater utility created three utility design requirements in the state:<br>○ Fees must serve a regulatory program.<br>○ Fees must be proportionate to the necessary cost of service.<br>○ Property owners must be able to refuse or limit their use of the service.<br>• In response to these changes, Ann Arbor moved from a flat fee structure to a tiered fee that is based on impervious area. Property owners can limit their use of the stormwater service by reducing impervious area.<br>• A case study with more information about these changes and advice for other communities considering a stormwater utility is available online here: http://migreencommunities.com/wp-content/uploads/2017/12/MGC_A2_StormwaterUtility.pdf |
| 29 | Text and images of stormwater BMP examples | **Providing Options to Reduce or Waive Fees, or Credit Onsite or Offsite Work**<br>• Communities can use the offer of stormwater fee reductions or credits to incentivize actions to reduce impervious cover or connection to the stormwater system and thus lessen the impact on the system. Some examples of actions that communities may allow for fee reductions or credits include installation of approved BMPs such as retention/detention basins, rainspout disconnections, and porous pavers, and educational and volunteer programs for residents, businesses and municipal employees.<br>• |
| 30 | | **Considerations in Using Fee Incentives** |

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| | | • Remember that stormwater fees are often set too low to provide an effective incentive for behavioral change or adoption of onsite stormwater infrastructure; thus, significant subsidies or combining the fee reduction benefit with other benefits (i.e., credits, etc.) can provide more effective incentives to rate payers.<br>• Your fee incentive design will influence revenues. Too strong of an incentive will deplete the amount of revenue collected in a utility, while too weak of an incentive can reduce engagement in the program.<br>• In any case, fee reduction and crediting opportunities should be clearly explained and publicized to your ratepayers. |
| 31 | Text and images from city? | **Example Program: Baltimore City, MD Stormwater Fee Reduction Program**<br>• Stormwater ratepayers in the city may receive a credit on their stormwater fee by installing and maintaining stormwater treatment practices and/or volunteering in hands on activities with the city.<br>• Example treatment practices include: planting trees, rain gardens, and rain barrels.<br>• Example volunteer activities include: tree planting events and trash clean-up days.<br>• Credit amount varies based on type action completed. For example, installation of a rain barrels is a credit of $25 a year and participating in an event is a credit of $10 per 4 hours of activity.<br>• Additionally, Baltimore provides credits and reductions to Non-Single-Family Properties such as churches, non-profits, industry, and business.<br>• For detailed information regarding this program see the City's Non-Single Family Guidance Document found here. |
| 32 | Text and image background [consider pulling the case study slide and the related resources slide together with above item through buttons, etc.] | **Related Resources**<br>• **Chapter 6** *[LINK TO CHAPTER]* includes additional detail and discussion about reducing fees and crediting approaches.<br>• Significant details on incentive-based approaches for green infrastructure implementation in stormwater utilities can be found in *Working with the Market: Economic Instruments to Support Investment in Green Stormwater Infrastructure* (pp 12-18). |
| 33 | Text and background image; consider pulling following related slides into this slide with navigational buttons | **Evaluating Feasibility**<br>• A first step to developing a stormwater fee (and associated utility) is to conduct a feasibility study that provides the community with enough information to decide if implementing the utility is sensible.<br>• Feasibility studies allow for local governments to obtain valuable insight into the various program service and funding issues without the full commitment to set up the utility. |
| 34 | Text and image, or linked box from overall slide | **Compiling Financial Information**<br>• Technical and financial data, combined with the public involvement/stakeholder process, typically provide elected officials with the necessary information to make an informed decision about setting up a stormwater utility in their communities. |

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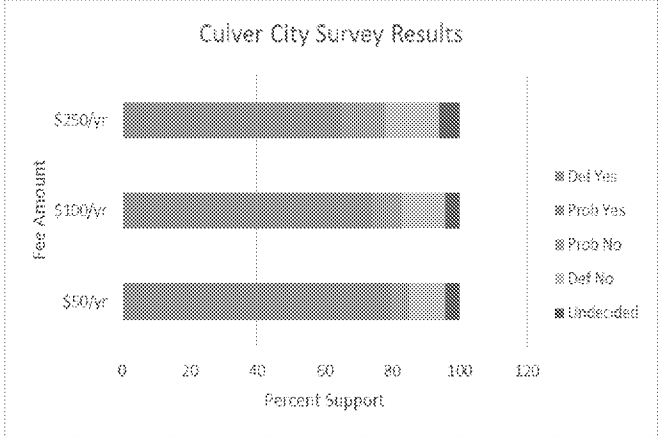
| | | • Feasibility studies typically address preliminary revenue requirements, usually from current stormwater budgets, and assess the billing area to determine the single family residential (SFR) billing rate, the service fee method to use and credits to provide, the preliminary rate charge for each ERU, and the responsible party for billing. |
| 35 | Text and image, or linked box from overall slide | **Gauging Community Support**<br>• While developing the feasibility study, voters are often polled to assess their attitudes about stormwater management, identify messaging strategies that resonate with the public, and evaluate willingness-to-pay different fee levels.<br>• This effort can also be helpful to identify relevant information that your community has already, and additional information you may need to collect. Data collection is further discussed below in Section XX.<br>• As discussed in Chapter 1, many communities contract with expert consultants who specialize in assessing funding options and recommending strategies to obtain approval. While use of outside consultants may seem expensive, few communities have the staff expertise available to develop a good feasibility study.<br>• |
| 36 | | **Case Study- Culver City, CA Polls Voters To Assess Tax Feasibility**<br>Facing significant MS4 permit compliance costs, Culver City, CA began planning a parcel tax initiative to obtain dedicated funding for its stormwater program. The City's consultant surveyed voters to evaluate acceptability of different parcel tax levels. Based on the results (see next slide), the city decided to pursue a tax of $99/year for single family residential, $69/year for multi-family residential, and $1096/acre for non-residential parcels.<br>For more information on Culver City's successful campaign, see https://www.epa.gov/sites/production/files/2017-05/documents/14_la5_1-3_herbertson.pdf<br>  |

**Commented [SD1]:** NOTE TO JOHN BLISS and JERRY BRADSHAW:
Might you have a feasibility study you've developed that we could reference?

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| 37 | Text and image, or linked box from overall slide | **Feasibility Study Benefits**<br>✓ Is low risk<br>○ Even if implementation of a stormwater utility is found infeasible, the study is a success because it accurately determined a "no go" decision was best.<br>✓ Tests the waters before committing to a user fee<br>○ This gives political leaders a sense of safety because the approach is phased and involves others in a "go" decision.<br>✓ Identify the viability of different fee levels and structures with key decision makers and the public.<br>✓ Can garner public support<br>○ Provides broader backing and wider support among the community and brings them into the process early.<br>✓ Builds momentum toward a "go" decision<br>○ Support for a "go" decisions is built through logical consideration of program needs and concerns.<br>✓ Detects early warning signs<br>○ Can provide an early warning of hurdles and potential pitfalls.<br>✓ Saves time and money<br>○ Implementation costs can be defined and may be lowered by anticipation and planning.<br>✓ Provides legal due diligence<br>○ Develops sufficient legal due diligence to allow for borrowing of implementation costs with later payback from the user fee revenue stream. |
| 38 | Text and image, or linked box from overall slide | **Lessons Learned**<br>• Compiled as part of a feasibility report for a community by a large international engineering and project management firm:<br>✓ Recognize that one size does not fit all.<br>✓ Collaborate with stakeholders and promote communication.<br>✓ Define the champion and "home" of the program.<br>✓ Clearly define the health, safety and welfare benefits.<br>✓ Clearly define the cost of each program element.<br>✓ Allocate level of service by geography.<br>✓ Pragmatically address inter-jurisdictional issues within watersheds.<br>✓ Keep abreast of new legislation and initiatives.<br>✓ Provide clear documentation for customer fees.<br>✓ Establish policies to address private property issues |
| 39 | Text and image | **Involving the Public and Key Decision Makers in Program Design and Discussions**<br>• A strong public education and outreach program is critical throughout the stormwater utility development process. Many people are unaware of the increasing cost of stormwater management and the options to fund it. A well-funded stormwater program can help reduce flooding, improve drought conditions, create better fishing and recreation, and improve |

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| | | water quality. Additional information on building your overall stormwater program "brand" and gathering overall public support is further discussed in **Chapter 1** [INSERT LINK]. |
| 40 | Pop-out text for each step | **Public Information and Education Effort Components**<br>• **Identify key users and groups.**<br>○ Two potential groups to target include (1) properties that generate a significant amount of runoff and often receive high stormwater bills (i.e., shopping malls) and (2) tax-exempt properties (i.e., schools and churches) that do not contribute property taxes into the general fund (which has traditionally been the source of stormwater management funding).<br>• **Establish an advisory committee.**<br>○ Include a cross-section of the community including representation from universities, businesses, non-profit organizations, churches, developers, and shopping center owners.<br>• **Create a stormwater utility website.**<br>○ The website should post appropriate progress documents and develop a frequently asked questions page.<br>• **Prepare pamphlets and presentations.**<br>○ Prepare a brochure and an electronic presentation describing the need for the stormwater utility, the rate method, and the projected rates.<br>• **Meet with key user groups and the media.**<br>○ Give presentations to civic groups and the media, and schedule one-on-one meetings with customers projected to receive the highest bills.<br>• **Distribute information before the initial billing.**<br>○ The stormwater utility brochure should be sent to all customers before billing. Include the customer's actual projected bill, if possible. |
| 41 | Text and images from the city? | **Case Study: Stakeholder Involvement in the City of Raleigh, NC**<br>• The City of Raleigh, North Carolina completed a consensus-based stakeholder process and held public meetings to evaluate the needs of the City, the level of service needed, and the funding strategy that would be needed to address the City's stormwater management issues. This outreach led to the successful creation of a stormwater utility in the City in 2003.<br>• A stakeholder group of 25-30 people met 8 times between October 2002 and February 2003 and discussed strategic topics to address the City's backlog of capital improvement projects and system maintenance needs.<br>• The City also held at least 10 public meetings around the city and distributed information about the stormwater utility on residents' water bills. Following passage of the utility ordinance in November of 2003, residents were initially billed in March 2004. |

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| | | • This case study is a great example of how to effectively involve stakeholders in the community so that the goals of the community are clearly articulated and are reflected in the development of the utility.<br>• For more information about the City of Raleigh's public outreach program, click here |
| 42 | Section title slide – image and text. | **5.2.2 Planning Your Funding Structure and Process**<br>• Collect the Information You Need to Implement a Dedicated Revenue System (jump to slide X)<br>• Develop a Notification Process to Inform Ratepayers of Pending Changes (jump to slide X)<br>• Develop a Billing System to Collect the Funds (jump to slide X)<br>• Develop a System for Distributing Collected Fees through the Budgeting Process (jump to slide X)<br>• Combining Stormwater Fees with Other Funding Sources in the Portfolio (jump to slide X) |
| 43 | Image and text; button/text link to bring out list of information | **Collect the Information You Need to Implement a Dedicated Revenue System**<br>• There are various datasets you will need to identify and collect prior to implementing a dedicated revenue source. The complexity of the datasets may depend on the type of fee you pursue (e.g., flat rate, ERU-based) [INSERT LINK TO SECTION BACK ABOVE].<br>• User and parcel area data (such as ownership and impervious area for each parcel) can be critical to developing and administering your system.<br>• Following are types of information that you may need to identify or collect to more fully plan for and administer a dedicated revenue source (though this is largely dependent on the rate structure used):<br>○ Essential parcel-specific information for developing a database:<br>▪ Parcel identification number,<br>▪ Parcel size,<br>▪ Address information,<br>▪ Ownership,<br>▪ Land use type / property type/classification (residential, commercial, etc.),<br>▪ Land use data,<br>▪ Aerial photography,<br>▪ Pervious surface area, and<br>▪ Impervious surface area. |
| 44 | Image and text | **Leverage Your Community's GIS Data and Skills**<br>• Leveraging your community's geographic information system (GIS) datasets if often instrumental in this process to link together datasets that will then be used for future billing.<br>• Local staff members will need to develop a schedule for routine monitoring and updating of the database as land cover and land use |

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| | | change on the applicable parcels so that billing can be adjusted as necessary in the future.<br>• Some communities will need to bring in outside expertise and tools to assist in gathering and organizing the information needed to plan and implement your fee system. Once the system is set up for the first time, your staff will probably be able to keep the data up to date in the future and make changes as land uses change in the future. |
| 45 | Text and image; consider button or hover for list info | **Develop a Notification Process to Inform Ratepayers of Pending Changes**<br>• Help ensure that ratepayers are not surprised by the stormwater-related charges they are asked to pay on future bills by developing a process to inform ratepayers of the upcoming changes. As noted previously, there is often a lack of awareness regarding stormwater impacts and services provided by communities; this confusion can be amplified when charging new fees without proper engagement and notification.<br>• Start your outreach program as early as possible during the process of assessing and establishing your stormwater utility.<br>• Notifying ratepayers of expected changes may be best accomplished using several different tools and mechanisms to get the word out. For example:<br>○ Public meetings/forums,<br>○ Pamphlets explaining the stormwater fee to be distributed with water/wastewater bills,<br>○ Sample bills, and<br>○ Information hosted online on the community's website.<br>• You should also consider establishing a way for customers to ask questions that arise when the stormwater fee is being developed or enacted. This could be done by providing a phone number, email address, and/or an online tool to submit questions. |
| 46 | Text and image from city? Consider buttons for 'guiding principles' and 'key messages' and 'critical time periods' and 'tools used' | **Case Study: Stakeholder Involvement in the City of Perry, GA**<br>• **Objective:** Promote, publicize, and educate stakeholders on the need for an enhanced local stormwater management program and the implementation of a stormwater utility and user fee system to assist this effort.<br>• The City of Perry developed the following **guiding principles** for its educational campaign:<br>○ The City's stormwater management issues are real and unresolved;<br>○ Implementation of the future stormwater program will effectively address these issues and benefits will result; and<br>○ Government must lead and develop a strategy to address all of the pertinent issues related to stormwater management.<br>• **Key messages** identified by the City to be emphasized:<br>○ Aging infrastructure;<br>○ Clean water; |

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| | | ○ Customer service;<br>○ Balance of cost;<br>○ Regulatory compliance and safety; and<br>○ Quality of life.<br>• **Critical educational time periods** were identified:<br>○ **Build-up to billing period:** Goal is to educate and build support among various stakeholder groups. Stress the current stormwater management issues, that all properties generate runoff, and the benefits of an enhanced program. Introduce the concept of fairness and equity in paying for the program through a stormwater utility.<br>○ **Billing Day:** Educate ratepayers on the new bill they have received. There must be a phone number that customers can call to get answers to questions. Non-technical personnel should be educated to answer basic questions on the rate structure and credits developed from the program. Advanced questions, including drainage complaints and service requests, should be answered by technical personnel. Another goal is to ward off criticism. Show that the program is taking a proactive approach in addressing stormwater management issues.<br>○ **Post-Billing Period:** Initiate long-term public education and response programs. Focus will shift from the customer's bill to responding to customer service requests and complaints. Strategies must be developed to keep "getting the word out" and accomplishing the community's long-term goals.<br>• Tools utilized by the City of Perry included fact sheets, FAQ's, bill stuffers, a website, public meetings, large customer notification, and city staff trainings.<br><br>This case study in included in the State of Georgia's Stormwater Utility Handbook (2008).<br>https://epd.georgia.gov/sites/epd.georgia.gov/files/related_files/site_page/Coastal_Stormwater_Utility_Handbook_2008.pdf |
| 47 | Text and image; box to click for two main options; link to bring up utility bill image | **Develop a Billing System to Collect the Funds**<br><br>**Bill Alongside Existing Water-related Services**<br>• Many communities already provide and charge for water-related services to its citizens, such as wastewater and drinking water. Most stormwater utilities add the stormwater utility fee onto an existing water/wastewater fee bill because it is inexpensive and relatively simple.<br>• If using this approach, you should carefully consider *how* the stormwater utility charge will appear on the bill and how it is explained. This has proven to be a challenge to some communities that have caused confusion by adding the charge without thoughtful consideration of how it is portrayed. |

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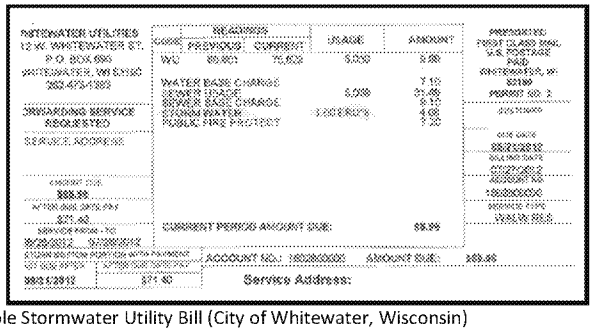
| | | • Click here for an example of a utility bill that accounts for multiple utilities, including stormwater.<br><br>  <br>Sample Stormwater Utility Bill (City of Whitewater, Wisconsin)<br>http://www.whitewater-wi.gov/water-utility/2239-stormwater-utility-charge<br><br>**Bill Stormwater Fees Separately**<br>• Although data does not readily exist regarding stormwater fees in communities without other water related services, there are user-fee funded stormwater programs who bill separately even if they have the option to co-bill with other utilities or a tax revenue collection effort/program.<br>• The choice for a community to bill separately is usually based on upon situations where there are many complex exemptions and similar complicated policies related to different billing classes. It is considered the least preferred option to bill utilities separately due to administrative burdens and confusion that can be caused to the customer. |
| 48 | Text and image; buttons to bring up brief summary of 3 main options and allow further navigation to their detailed pages | **Develop a System for Distributing Collected Fees through the Budgeting Process**<br>• A key consideration for your system to distribute collected stormwater fees is whether the fees will be co-mingled with your community's General Fund, directed to an Enterprise Fund, or collected in a Special Revenue Fund.<br>• There are significant implications of this decision; co-mingling funds with general fund can reduce clarity in the budgeting process and reduce opportunities to access other financing options (see **Chapter 4** for detailed information on financing options) and to form creative partnerships (see **Chapter 6** for detailed information about private partners and investors).<br><br>*Buttons for Overall Summary Info*<br>• **General Fund:** Stormwater fees in some communities are collected into the General Fund and then allocated and distributed to address stormwater functions. |

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| | | • **Enterprise Fund:** Most communities with stormwater fees use an Enterprise Fund to centralize the stormwater utility fee revenues and do not comingle the collected fees with other city functions.<br>• **Special Revenue Fund:** Stormwater fees in some communities are collected into a Special Revenue Fund that can only be used for its stated purposes. |
| 49 | Text and image | **General Fund**<br>Revenue collected from the stormwater utility are combined into the general fund, which accounts for all financial activities not funded by specially designated and defined revenues. Funds for stormwater services are then allocated to the various city departments responsible for stormwater-related activities through an annual budgeting process. |
| 50 | Text; buttons to enable sub-list information to be presented | **Enterprise Fund Accounting**<br>A stormwater utility may rely on an accounting system or process known as an enterprise fund, which is a form of accounting that utilizes a separate fund or cost center for a specific purpose. The services provided are financed and operated similar to those of a private business. User fees are established and revised to ensure that revenues are adequate to meet all necessary expenditures. Collected fees are not typically commingled with the revenues and expenses of all other government activities. Common enterprise funds are public utilities including water, wastewater, and trash disposal.<br><br>Keeping stormwater fee-based funds separate from other general funds is preferable as it reduces the chances these funds will be reallocated for other purposes and can also help open the door to other program financing options (e.g., revenue bonds) and partnerships (Chapters 4 and 6 include additional detail on other financing options and partnerships). Creating a structure that keeps stormwater fees separate may also address a voter concern that fees may be reallocated without public notice or process.<br><br>• **Revenue**: may include user charges and fees, investment income, and any other enterprise revenues. Enterprise revenues are often required to be used to support the expenditures of the enterprise fund only, rather than to support ongoing municipal operations or subsidize the general fund.<br>  ○ Varies from state to state. In some jurisdictions, enterprise revenue can be transferred to the community's general fund with the support of the appropriate governing bodies.<br>• **Costs**: costs associated with operating a stormwater enterprise fund are varied and encompass a broad spectrum of administrative, environmental, legal, and capital functions.<br>  ○ Costs may include direct costs (salaries and wages of enterprise employees and contractual payments), indirect costs (appropriated in the general fund, general fund is reimbursed from the enterprise fund), employee benefits, legal and borrowing costs, capital expenditures or |

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| | | improvements, emergency reserve, depreciation of fixed assets and infrastructure.<br>• Some **advantages** of enterprise fund accounting include:<br>○ Demonstrate total cost of service: with all the direct, indirect, and capital cost of providing the service in a consolidated fund, a community will be more readily able to identify the true cost of providing a service.<br>○ Provide useful management information: with the consolidation of revenues and the cost of services and information on the operating performance of the fund, the community will have useful information to make decisions on user charges and other budgetary items.<br>○ Retain investment income and surplus: unlike services operating in the general fund or special revenue fund, all investment earnings and any other operating surplus is retained in the enterprise fund, rather than returned to the general fund at year-end. Once a surplus is certified as available (similar to free cash), it may be used to fund operating, capital, or debt service costs associated with the enterprise.<br>○ Provide better ability to implement capital improvements: allows department providing the service to better plan for and implement capital improvements, because these can be forecasted and integrated into the long-term financial management of the department. |
| 51 | Text and image; allow click for case study to pop up | **Special Revenue Funds**<br>• These funds generally collect fees from specific sources with legal restriction on expenditures tied to a specific purpose. The Government Accounting Standards Board defines it as being "used to account for and report proceeds of specific revenue sources that are restricted or committed to expenditure for specific purpose other than debt service or capital projects."<br>• Special Revenue Funds are a clear way to have a community collect revenue outside of an enterprise fund that can be used for financing purpose and give an alternative option to putting the revenue into your general fund. |

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| | | **Case Study: Special Revenue Fund for Stormwater Management in Fairfax County, VA**<br>• In FY 2010, Fairfax County, VA adopted a budget plan that included a special service district with taxes to provide a dedicated revenue source to support its stormwater management programs.<br>• According to the County's website, the fund is dedicated to serving these purposes:<br>○ staff operating requirements,<br>○ stormwater capital projects (including repairs to infrastructure),<br>○ measures to improve water quality,<br>○ stream stabilization,<br>○ rehabilitation and safety upgrades of dams,<br>○ repair and replacement of underground pipe systems and surface channels,<br>○ structural flood proofing,<br>○ Best Management Practices (BMP) site retrofits,<br>○ watershed master plans,<br>○ increased public outreach efforts, and<br>○ stormwater monitoring activities.<br>• An increase in the service rate in FY 2019 is expected to provide $77,886,250 in revenue in FY 2019. |
| 52 | Text and image; buttons/hover to bring up examples | **Combining Stormwater Fees with Other Funding Sources in the Portfolio**<br>• If stormwater user fee charges were used to fund the entire stormwater management program, customer billing rates/user fee charges would be high and likely exceed the customer's "willingness to pay" threshold. Therefore, as a dedicated revenue source likely will not provide 100% of funding a community needs for its stormwater program, many communities combine primary and secondary sources of funding together (including a dedicated revenue source) to craft a portfolio of funding to support their activities. Some refer to this a "blended" funding approach.<br>○ **Examples of Primary Funding Sources:**<br>▪ Stormwater user fees (stormwater utility)<br>▪ General fund taxes and appropriations<br>○ **Examples of Secondary Funding Sources:**<br>▪ Site plan review fees<br>▪ Special assessments<br>▪ Special service fees<br>▪ Revenue bonds or loans for capital improvements<br>▪ In-lieu of construction fees<br>▪ System development charges<br>▪ Impact fees<br>▪ Developer extension/latecomer fees |

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| | | ▪ Fees collected by other departments (e.g. solid waste management fees used for trash management expenses)<br>▪ Special Purpose Local Option Sales Tax (SPLOST)<br>▪ Federal and state grant funding or loans.<br>• For additional information on program funding and financing options that may play into a blended funding approach, refer to **Chapter 4**. [Insert link]. |
| 53 | Section title slide – image and text. | **5.2.3 Developing Ordinances/Rules to Implement your Dedicated Revenue Source**<br>• Become Familiar with Considerations for Legal Framework / Constraints of Fees/Taxes (jump to slide X)<br>• Establishing an Ordinance or Other Rules (jump to slide X)<br>• Ensure Your Rate Structure is Clearly Established (jump to slide X)<br>• Carefully Consider Credit and Offset Provisions to Include in the Program (jump to slide X)<br>• Creating a Process to Review and Adjust Fees (jump to slide X)<br>• Defining the Utility Structure if You are Forming a Separate Utility to Manage the Program and Collect Fees (jump to slide X) |
| 54 | Text and image | **Become Familiar with Considerations for Legal Framework / Constraints of Fees/Taxes**<br>• As noted earlier in Section XXX, knowing your state and local laws is important to know whether a stormwater fee or tax is legally viable in your locality. In legal challenges to local stormwater utilities, issues generally fall in two categories including:<br>○ (1) The authority to enact, implement, and fund the program.<br>○ (2) The legality of the financing mechanism and methodology involved.<br>• The 2016 NACWA report titled *Enacting, Implementing, & Funding Stormwater Programs* provides significant detail on legal issues that can impact stormwater funding programs. Explore this resource if you would like to dive into further detail on this subject. |
| 55 | Text and image; button or click here text to bring up case study info | **Establishing an Ordinance or Other Rules**<br>• Establishing an ordinance or other rules related to your stormwater utility can help establish proper legal authority and identify key attributes and functions of the stormwater utility itself.<br>• The ordinance/rules should at least address:<br>○ The selected rate structure of the utility,<br>○ Credit and offset provisions,<br>○ Adjustments for hardships or land uses of concern, and<br>○ The fee review and adjustment process. |

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| | | • Various communities across the country have adopted these types of ordinances and they provide good examples for other communities to explore and emulate/adapt.<br><br>**Case Study: Peachtree City, GA: Model Stormwater Utility Ordinance**<br>• Sections of the Ordinance include:<br>a. Definitions<br>b. Establishment of a stormwater utility and enterprise fund<br>c. Scope of responsibility for stormwater management systems and facilities<br>d. Stormwater utility customer classes<br>e. Stormwater user fee charges<br>f. Stormwater user dee charge rates<br>g. Stormwater user fee charge exemptions<br>h. Enforcement methods and inspections<br>i. Stormwater user fee charge billing, delinquencies, collections, and adjustments<br>j. Appeals and hearings<br>• Click here to view the complete ordinance.<br><br>**Case Study: Model Stormwater Utility Guide produced for the State of Maine**<br>• Generally, the Ordinance follows the structure below:<br>a. Demonstrate need for unilateral stormwater management utility, including how the existing stormwater management approach is inadequate;<br>b. Describe the engineering and financial needs analyses that demonstrate the need and feasibility for the creation of a stormwater utility.<br>c. Include the findings for the most viable and efficient financing options (i.e., fee structure).<br>• Click here to view a template of a stormwater ordinance. |
| 56 | Text and image | **Ensure Your Rate Structure is Clearly Established**<br>• As discussed above in sections XX, stormwater utility fees can be structured in different ways.<br>• This will determine how user fees are calculated and assigned to parcels within the locality. Unlike other utilities, it is difficult to track service use for each parcel due to the impracticality of direct measurement of stormwater runoff from each parcel during storm events. This can create conflict between customer equity and rate structure efficiency.<br>• Clarity in your rate structure and how it is communicated with the community can be critically important to the success of your dedicated revenue source. |

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| 57 | Text and image; maybe buttons to allow navigation to the types of considerations listed here in next slides along with a couple case studies | **Carefully Consider Credit and Offset Provisions to Include in the Program**<br>• Credits or exemptions for stormwater utility fees can be used to provide incentives for certain practices or relief from utility fees to certain types of land uses and economic hardship.<br>• Some examples are provided in this portion of the training module, but further detail and discussion regarding incentivizing owners can be found in **Chapter 6** section XX. [Insert Link] |
| 58 | | ***Incentivizing Onsite Practices***<br>• Communities may choose to implement a credit system to reduce stormwater fees for a parcel/customer that undertakes on-site mitigation of stormwater impacts. Certain structural controls, such as bioretention areas, dry wells, or rainwater harvesting systems can be used to mitigate the stormwater runoff contribution of a single parcel. |
| 59 | | ***Offering Education Credits***<br>• Education credits may also be offered by a jurisdiction, since government entities such as public schools can alleviate some of the cost and responsibility of water resources education that the local government would otherwise have to address.<br><br>**Case Study: City of Griffin, GA: Education Credits for Stormwater Utility Fee Reduction**<br>• The Griffin stormwater utility fee has an education credit that is available to public and private schools in the stormwater service area that have 1,000 or more students in their system.<br>• The credit offers up to a 50% reduction in the schools' stormwater charges for teaching the "Water Wise" program to students.<br>• The "Water Wise" program teaches children about the importance of water resources and how they can help to improve water quality in their communities.<br>• Schools that are interested in obtaining a credit for teaching the "Water Wise" program must apply in writing to the stormwater utility and certify how many students attend the school, what proportion of the students in each grade will take the curriculum, and the amount of time during the school year that the students will take the program. |
| 60 | | ***Adjusting for Hardship or Particular Land Uses of Concern***<br>• Local governments can provide rate relief for eligible low- or moderate-income property owners and tenants through assistance programs that cap the total fee amount for a given ratepayer.<br>• Jurisdictions may either offer customer assistance discount programs for certain categories of ratepayers (such as senior citizens, low-income residents, and disabled people) and land uses, such as educational institutions and religious organizations. |

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| | | • Early in the fee development process, public agencies should meet with local community-based, faith-based, and other not-for-profit organizations that would likely be eligible for fee subsidies or caps. This informs stakeholders about the purpose of the fee and communicates the city has their interests in mind. Cities should also invite these stakeholders to participate in the shaping of rate assistance programs to ensure that those programs function as effectively as possible.<br>• Local governments should factor the costs of hardship or customer assistance programs into the calculation of costs to maintain the targeted level of service.<br>• Stormwater programs can look to other existing programs that may have similar policies or precedents associated with low-income property owners and similar discount programs.<br>• In addition, the inclusion of exemptions for property classes (e.g., NGOs, etc.) can raise questions of equity, so exemption classes should be minimized where possible.<br><br>**Case Study: City of Baltimore Hardship Exemption Program**<br>• The city's program Waives the Chesapeake Bay Restoration Fee and the Stormwater Remediation Fee for eligible customers.<br>• The program uses the same criteria as Maryland's Office of Home Energy Programs and considers customers' income levels and/or the receipt of public assistance or benefits.<br>• Homeowners and tenants can apply for the discount each year if they meet the following criteria:<br>a. The applicant must be a City of Baltimore resident who receives a water/sewer bill directly from the City.<br>b. The applicant must certify that he/she is the property owner-of-record with the Maryland Department of Assessments and Taxation, or provide a lease showing his/her responsibility for paying water/sewer charges at the property.<br>• The applicant must also meet two of the following conditions:<br>a. Receive energy assistance subsidy;<br>b. Receive public assistance – Supplemental Security;<br>c. Receive Income (SSI) or food stamps, and medical assistance;<br>d. Receive veterans, social security, or social security disability benefits; or<br>e. Meet specific gross income criteria as specified at the following website: https://publicworks.baltimorecity.gov/hardship-exemption-program |

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| 61 | Text and image; button or click here text to bring up case study info | **Creating a Process to Review and Adjust Fees**<br>• A community's rate structure and/or fees may need to be adjusted from time to time, so creating a process for this is important.<br>• For example, a community's watershed capital infrastructure plans may provide estimated costs for future projects and could serve as a valid reference for future resource needs, but actual costs may vary from these estimates.<br>• Additionally, local communities typically develop adjustment application forms, which allow for property owners to petition to have their stormwater fee adjusted due to billing errors or inaccuracies that may have occurred (ex. In the assessment of the amount of impervious surface area on the property).<br>• The local community should be prepared to develop a process for updating the billing unit data for an existing customer or to enter the data for a new customer in the database.<br><br>**Case Study: The City of Philadelphia Addresses Appeals for Fees**<br>• To support inquiries by customers, the city established an appeals process with defined forms and a dedicated email address for stormwater appeals.<br>• An issue that has caused confusion with customers is how properties are billed for garages located in side lots and how the properties are deeded. The city has worked considerably to resolve this issue and make it clearer for its customers.<br>• A detailed FAQ page is included on the city's website: https://www.phila.gov/water/wu/stormwater/Pages/ResidentialSWBilling.aspx |
| 62 | Text and image; Perhaps simple table or list for advantages/disadvantages of approaches; include clickable link to enable organizational chart example to pop up | **Defining the Utility Structure if You are Forming a Separate Utility to Manage the Program and Collect Fees**<br>• The administrative and organizational structure for your stormwater utility is critical. Proper planning and design of these structures will aid in its success. Poor organization can lead to major difficulties in executing tasks and activities. Roles and responsibilities should be clearly defined for the stormwater utility to ensure operational success.<br>• (Note that different terminology is used in some areas of the country. For example, while stormwater "utility" is widely used, Pennsylvania uses the term stormwater "authority.")<br>• Stormwater utilities can be established under an existing service department, such as the Public Works Department, or as a standalone entity (e.g., Stormwater Utility Department). |

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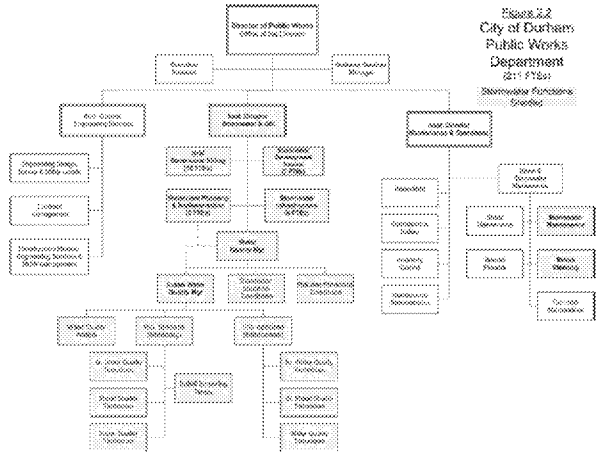
| | | ○ An advantage of a utility incorporated into an existing department is that staff resources are readily available.<br>○ An advantage to a stand-alone department is that it is dedicated exclusively to stormwater management services. However, a main disadvantage is that the up-front start-up costs can be high.<br>○ One solution to this issue is to establish the stormwater utility under an existing department and then evolving it to a standalone entity in the future.<br><br>Click here for an example of an inclusive and detailed organizational chart.<br><br>  <br><br><br>City of Durham, NC Public Works Organizational Chart (https://durhamnc.gov/Archive/ViewFile/Item/1088) |

***Subchapter 5.3: Go: Deploying Your Program with Your Established Framework***

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| 63 | Text with image; perhaps navigation to sections that are | **It's Go Time!**<br>• At this stage, it's time to put all of your planning efforts to work as you deploy your framework for the stormwater fee. |

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| | listed as main steps on this slide | • You will need to engage in significant communications efforts and continue to clarify and explain the program to decision makers and the public.<br><br>These are your main steps:<br>- |
| 64 | Text with image; buttons or other technique to condense or show sub-lists included here | **Formally Propose the Dedicated Funding Program to the Community**<br>• This phase involves explaining, for decision makers as well as public representatives, the specific funding proposal for which you are seeking approval and taking a variety of action to build support for the program approval. **Chapter 1** discusses in greater detail how to engage with and persuade key opinion leaders, decision-makers, voters, and the general public (LINK)<br>• The proposal should be developed in a way that it will be viewed by decision makers and the public-in-general as technically, politically, legally, and ethically acceptable. The proposal should reflect the goals, concerns, and interests of key stakeholders.<br>• The proposal should clearly identify the stormwater management problem to:<br>○ Allow the advisory committee the opportunity to agree on how to respond to the problem;<br>○ Help decision makers become convinced they should authorize the proposed solution; and<br>○ Build political support across a community for the program you are proposing.<br>• Steps/tasks associated with developing a successful proposal:<br>○ Identify stakeholder participants;<br>○ Convene and provide logistical support for meetings;<br>○ Prepare documents, such as research on what other communities have done, options for group consideration, draft improvements, and organizational support that keeps the process moving forward;<br>○ Affirm intention to help implement the utility once it has been adopted;<br>○ Demonstrate that the strategy is coming from well-informed sources;<br>○ Illustrate how the proposal is tailored and adapted to your community;<br>○ Assure technical feasibility and quality;<br>○ Elucidate the resources required for administration;<br>○ Clarify how the utility will be cost effective; and<br>○ Explain how other options were considered and why they were not adopted.<br>• Developers of the proposal should be willing to accept improvements to the strategy and should express that willingness to stakeholders keeping in mind successful implementation of a dedicated revenue mechanism will require cooperation. |

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| | | • Following proposal, the role of the individuals advocating for the adoption of the stormwater utility program will shift to becoming change agents for implementing it. |
| 65 | Text with image; button to make case study info pop up | **Engage in Continued Public Outreach and Involvement to Build Awareness and Support and Address Concerns**<br>• By investing heavily in communications and education (e.g., working with the media and using signage on stormwater BMP's to inform citizens and decision makers about the new services that a utility will provide), local jurisdictions can avoid and reduce resistance during the start-up period by people who did not participate in the initial adoption.<br>• Green infrastructure has distinct communication advantages over gray in that it is more "visual" and aesthetically attractive to members of the general public than gray infrastructure. Additionally, green infrastructure is scalable, so that individual property owners can see how, as managers of their homes and businesses, they can assist in solving stormwater environmental problems. Placing an emphasis on the use of green infrastructure in the stormwater management program, which is ultimately being funded by the stormwater utility, will likely help to gain public support.<br>• It is important to establish goals and an ultimate vision for the future to be achieved by the stormwater management program that will be appealing to members of the community.<br><br>**Case Study: City of Lynchburg, VA**<br>• The City of Lynchburg states that the "ultimate goal of its stormwater management program," which is now funded largely by its newly developed utility, "is to help maintain its pristine water sources" – the James River and a nearby reservoir.<br>• On its website (www.lynchburgva.gov/), the City provides a slide show, which highlights its water sources and is titled "This is Our River…Our Future…" |
| 66 | Text with image (stakeholder involvement, perhaps a council type meeting image) | **Go Through the Approval Process**<br>• Approval processes for stormwater fees tend to be relatively unique in different regions or communities, which ties back to legal considerations discussed previously.<br>• Regardless of the process, you must ensure that the proposed stormwater fees are placed on the agenda and/or ballot in time to perform the needed level of outreach to garner support and that you don't miss a critical approval cycle.<br>• Stakeholder workshops help to not only provide information to the public and increase support from potential customers, but also is helpful in identifying "champions" in differing stakeholder groups, |

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| | | such as business, homeowner associations, etc. Ideally, these champions would be chosen by elected officials to provide input during approval process, as noted by staff associated with the City of Raleigh, NC stormwater utility (WEF, 2012).<br>• Refer to **Chapter 1** for additional discussion of building a strong stormwater program "brand" which can help when it comes to getting approval in the end. |
| 67 | Text with image | **Notify Ratepayers of Pending Changes through Your Established Notification Process**<br>• Using your developed notification process (Link to Section X above), communicate you're your ratepayers about the changes they should expect to see in their bills and when they should expect to see them.<br>• A stormwater utility brochure or some other type of information package should be sent to all customers within the billing area. If possible, the customers actual projected bill should be included in the package to develop additional transparency.<br>• The first bill is the most important because many customers do not focus on the new stormwater fee until they receive their first bill. However, the municipality should notify customers of their estimated fee several months before billing begins. |
| 68 | Text with image | **Have Customer Assistance Staff Ready to Address Customer Questions, Concerns, and Requests for Review, Offsets, or Credits**<br>• Community staff who have been involved in previous phases that led to the adoption of the utility should be able to provide additional support throughout the implementation process.<br>• The municipality should create a telephone hot line, e-mail service, and website with an FAQ's page to address any questions or concerns the customers may have.<br>• Your team should draw directly upon the processes you have already established for addressing issues such as fee reviews, offsets, or credits. |
| 69 | Text with image | **Use your Administrative Structure to Collect and Track Revenue, Expenditures, Work Completed, and to Help Inform Budgeting Processes**<br>• Leaning on the administrative structure you have developed, allow the system to start functioning to support overall program administration.<br>• Communities use various tools for billing, budgeting, tracking, etc. so these approaches will need to be tailored to work in your community. |
| 70 | Text with image | **Continue Strong Communication and Public Engagement (forums, etc.) while Shifting the Focus to Transparency for Fee Expenditures** |

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| | | • Communication with stakeholders was important while establishing the fee and will continue to be into the implementation and the future.<br>• You should make a conscious effort to transition some of the communications efforts to reporting on program expenditures to increase transparency and show the community what services / benefits they are now receiving.<br>• Some examples of continued public engagement and outreach include:<br>  ○ Maintain an updated webpage explaining why the utility matters and showcasing case studies of successes and benefits.<br>  ○ Send a letter every year to the owners of properties with significant impervious surfaces reminding them of green stormwater infrastructure credit opportunities (if they exist in your community).<br>  ○ Distribute information about available credits with permit applications for new construction or renovations.<br>  ○ Hold an annual public meeting to present and discuss the year's accomplishments and future plans.<br>  ○ Public events to dedicate major new stormwater infrastructure projects, making sure to inform rate payers, elected officials, and the press about these important accomplishments. Show the voter what their money has made possible! |
| 71 | Text with image; maybe buttons for list items | **Remain Open to Evaluation Revenues, Public Perception of Fees, and Consider When/How to Make Any Needed Adjustments**<br>• To enable adaptive management approaches, you should encourage decision makers and other stakeholders to be willing to evaluate the stormwater utility plan periodically and be flexible enough to incorporate learning-by-experience.<br>• Various factors may necessitate adjustments to the stormwater program:<br>  ○ Insufficient resources may have been budgeted for the program by local authorities or granted from external governments or other resource providers. If additional resources cannot be obtained, the program will need to be altered.<br>  ○ The stormwater problem may have changed (e.g., climate patterns change and may cause stormwater events to become more frequent and severe, sea level rise may increase baseline risks for flooding in coastal communities).<br>  ○ Learning new and effective ways to manage pollution and flooding threats alongside regulatory partners may involve trail, error, and possible reform.<br>  ○ The regulatory environment is dynamic. NPDES permits will be extended to more Phase II communities and water- |

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| | | quality based requirements (e.g., TMDLs) may provide new drivers for some programs.<br>• Stepping back to reassess progress, reality, and future projections will enable your program to be more adaptable and reliable over time for the environment and the community. |

## ***Subchapter 5.4: Resources***

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| 72 | Text with image; can consider if there is a good visual way to lay this out potentially with report covers or a once sentence summary of resource, etc. | There is a significant body of work that has been created regarding stormwater fees and utilities. Below is a list of some key resources. This list is not intended to be comprehensive of all existing resources.<br><br>****WE WOULD LIKE TO INCLUDE A VERY CURATED LIST OF TOP RELEVANT RESOURCES AVAILABLE ONLINE WITHOUT COST TO ACCESS; MAYBE 5 TO 10 RESOURCES TOTAL; WE HAVE MANY COMPILED, BUT PLEASE MAKE YOUR SUGGESTIONS:**<br><br>- Western Kentucky University Annual Stormwater Utility Survey<br>- EPA Webinar titled "Paying for Stormwater - The Benefits of a Utility"<br>- National Association of Clean Water Agencies. (NACWA) Legal Considerations Implementing, and Funding Stormwater Programs: Navigating Litigation Floodwaters, 2016 Edition<br>- National Association of Flood and Stormwater Management Agencies, 2006. "Guidance for Municipal Stormwater Funding," Developed under EPA grant. Washington, D.C.<br>- Stormwater Utility Handbook: A Step-by-Step Guide to Establishing a Utility in Coastal Georgia<br>- Making It Rain: Effective Stormwater Fees Can Create Jobs, Build Infrastructure, And Drive Investment in Local Communities (NRDC 2018)<br>- Local Government Stormwater Financing Manual: A Process for Program Reform (University of Maryland Environmental Finance Center, 2014)<br>- Funding Stormwater Programs, EPA 2009 |